Chapter 1
INTRODUCTION

The chapter introduces the research study and discusses the problem, hypotheses, objectives and methodology of the study. It also discusses the problem in the light of brief review of literature studies on gender access to ICTs and research questions. It contains a detailed description of the method of data collection, universe and units of the study and sampling of units and tools for data collection, exposure and not exposure of both old and new ICT and organization of the research.

THE RESEARCH PROBLEM

In all societies of the world gender is one of the bases of social differences and inequalities. It is a social structural phenomenon. The world people live in is always ordered by gender. Yet, it is also produced, negotiated and sustained at the level of everyday interactions. Hence, it is embodied as well as lived by men and women. It encompasses both social divisions and cultural distinctions between men and women, through the characteristics commonly associated with feminity and masculinity. Gender is lived and experienced differently, depending on one's class, ethnicity, nationality and sexuality. While cultural perspectives tend to conceptualize differences between women and men simply in terms of culture or identity, sociologists are more concerned with patterned inequalities. Gender inequalities influence not only the distribution of status, class and power, but also the access to means of capacity building of people in society. Information and Communication Technologies (ICTs) are no doubt bridging the gaps of territories, cultures and times. But, like other technologies these new technologies are also vulnerable to gender perceptions, identities and differences. ICTs which refer to a diverse set of technological tools and resources to create, disseminate, store, evaluate and manage information. The ICT sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware and software and services and electronic media, for example, the Internet and electronic mail. Hence, ICTs are sets of technologies that include both new and not so new equipment for human and digital communication. Information is a key resource and communication is an integral human process in every society. ICTs are rapidly consolidating global communication networks and international trade with implications for people. Information

technology is seen as a process of bringing positive developments in society that would bring new social values; develop new social relations and offer widespread access to crucial resources. Hamelink supports an approach focusing on 'social shaping of technology', which was originally suggested by Mackengie and Wajman (1985). It emphasizes the dynamic interaction between the social forces that shape technological development and the technological innovations that effect social relations. Among the factors shaping ICTs are socio-economic, political, cultural and gender-related. ICT is placed between a communicator and the audience and thereby becomes an instrument for bringing about development of the people. The main emphases are on how effectively the means (ICTs) can be used to bring about development among the people comprising men and women. On the other hand, the Utopian perspective refers the present times as 'ICE age', 'media saturated age', 'new civilization', 'information revolution', 'knowledge society' and 'age of infotainments'. It derives its image from a techno-centric perspective that is characterized by an emphasis on the historical discontinuity. In this techno-centric perspective, the imperative of technological development determines social arrangements, i.e., technological potential derives history (Zuboff 1988). It holds that the digital revolution definitely marks the passage of world history into a post-industrial age. Those who support this perspective argue that the emerging global information society is characterized by positive features. There will be more effective healthcare, better education, more information and diversity of culture. New digital technologies create more choice for people in education, shopping, entertainment, news media and travel. It is based upon the notion that a technological discontinuity (the 'digital revolution') possesses a social discontinuity- third wave civilization (Toffler 1980). Castle (1989) and Poster (1990) see a break in the form of society and conceptualizes a new form of society; namely, the information society characterized by the information technologies, the economic worth of communication, the increase in the information occupations, the spread of information networks or simply the obviousness of an explosive growth in signs and signification. Subscribers to the notion of information society quantify some or other of these indicators and then claim (without justification) that these quantifiable elements signal a qualitative transformation – the emergence of an 'information society' (Webster 1995: 219). The new frontline of cyber has confronted new divide while the developed community enters into the information society. These divides are 'digital divide', 'knowledge divide', 'development divide' and 'social divide'. Digital divide is a term that is used to describe the inequality in access to ICTs among social groups including the

gender based differences between men and women. ICTs may well and will create inequalities; ICTs are usually not invented primarily to bridge social divides. Technology usually is to the benefit of the technology sense of the skilled users, which will most probably not keep pace in terms of life opportunities and jobs. The question "How can ICTs bridge social divides?" involves the whole agenda of socio-economic aspects of ICT research in e-Government, e-Work, e-Health and e-education. Answer to such a question is related to the issue of access to ICTs and gender access to ICTs is the prominent one among the discourses on the social divides created under the impact of ICTs. Gender access to ICTs is variable in the context of place, culture and economy. Obviously, it is different in a peripheral region like North East India. Therefore, a question is posed: What patterns of gender access are perceived in North East India, specially in Silchar town? The question has been attempted in the context of the Silchar town.

REVIEW OF THE LITERATURE

Karl Jasper (2001) argues: "Philosophy springs from communication and must there be realized and ascertained again ……. The unobjectifiable measure of the truth of all philosophizing is always the communication which it effects and elucidates". The philosophical bases of Marxist mass communication research examine the glaring shortcoming of its inability to merge theory with practice. Attention has been drawn to an alternative approach to overcome the limitations of existing critical research in Marxism (Games 1983). Philosophic reflections on communication, language and meaning in various philosophies have their origin in 'axial time' (800-200 B.C.) with Vedantism and Buddhism in India. The capacity of communication built with the development of language over thousands of years has in turn generated the process of conventionalization of communicative action and the whole idea that the human language must have evolved out of pre-linguistic communicative systems is compelling one (Gandhi 1974). In the Sociology of Communication and Mass Media which is comparatively a recent arrival in the field of sociological research, communication refers to a social process; flow of information; circulation of knowledge and ideas in human society; propagation and internalization of thought (Rao 1966:7). "Communication is the transformation of information, ideas, emotions, skills etc. by the use of symbols, words, pictures, figures, graphs etc." (Berelson and Steiner 1964:527). Through communication, man links himself with his social environment to constitute an interaction system. In this sense, communication is *sine-qua-non* for the birth and growth of

human society. It is basic to human social organization (Mead 1969:253). The structural root of the power of mass media springs from their unique capacity to deliver to a politician the audience which in size and comparison is unavailable to him by any other mass media. The psychological root of media power stems from the relations of credibility and trust, albeit in different degrees, that different media organizations have succeeded in developing with members of their audiences (J. K. Singh 2001).

Contribution of Chicago school to studies of social impact of media communication is well known in the area of communication researches. There were also many important Chicago style studies of social significance conducted outside the Chicago sphere. These included, most notably, the attention given to communication media and leisure in Lynd and Lynd's (1929, 1937) classic studies of 'Middle Town' as well as major studies of journalism and film (Desmond 1937; Lee 1937; Rosten 1937,1941; Throp 1939). These studies suggested that mass communication has a broad impact on patterns of everyday life and creation of a national culture. Many smaller studies also reflected similar perspectives (Prugger 1941; Punke 1937). Although most of the research is focused on communication institutions and their effects on society, the influence of society on the communication media was also recognized (Harris 1933). Most of the research on the social impact of communication grew out of concern with the effect of mass communication, particularly on children and youths (Healey 1915; Phelan 1919; Jewett 1976; Young 1922). There was a good deal of efforts to establish historical understanding of the developing media of communication (Young 1922; Mott 1938, 1941; Hampton 1931; Jacobs 1939; Archer 1938, 1939).

After the World War II the centre of sociological communication research was to shift from the Chicago School to Columbia. Lazarsfeld had more substantial impact on the sociology of communication, however, through the establishment of a unit for applied social research at Columbia. Lazarsfeld succeeded in translating the office into a general centre for applied research that became an integral part of the university structure. Lazarsfeld's applied research institute evolved into a model that was duplicated in many other universities. Some of the significant works of the Princeton/ Columbia research shops were classic works carried out by Lazarsfeld (1940); Cantril et al. (1940); Lazarsfeld and Stanton (1941, 1944, 1949); Lazasfeld, Berelson and Gandet (1944); Merton (1946); Berelson, Lazarsfeld and Mc Phee (1954); Katz and

Lazarsfeld (1955) and Klaper (1960). Mac Quail (1969) identified three major areas of enquiry in the field of mass communication research during the years covering the 1930s, 1940s and much of the 1950s: (a) the research concerned with behaviour, interest and structure of audience, (b) the researches on the effectiveness or persuasive power of media and (c) the researches concerned with general social effects of the mass media. Mass communication is one of the topics among many from the social sciences and only one part of a wider field of enquiry into human communication. The term 'mass communication' came into use in the late 1930s. Mass communication is typically manufactured in standardized ways (mass production) and reissued and repeated in identical forms (Mac Quail 1969:40).

Recent trends in anthropology reflect an increasing acknowledgement of the significance of mass media to the process of identity formation. Purnima (1999) analyzed the ways in which men and women in New Delhi actively engage with and interpret Indian TV and the place of their interpretations in their constitution as national and gendered subjects. Purnima's analysis of TV situating viewers in particular socio-historical contexts is to show how class, community, gender, age and household position mediate the people's view of television texts. Krishnan (1990) tries to analyze the manner in which both men and women living in New Delhi interpret serials on Indian television, in particular those reflecting and constructing discourses of gender and nationhood. The constellation of discourses is of crucial significance because the Indian state has attempted to use TV to construct a pan-Indian culture.

In sociological literature 'media of communication' is one of the most complex themes of human life. In 1948, Berelson attempted a very useful review of research findings on mass media. Here, the relationship between gender and technology provides a starting point for a discussion on gender and ICTs. Those who deal with women's unequal access to technology make a case for considering the content of the relationship between gender and technology (Krishnan 2004). Technologies that concern with information and communication have some unique dimensions. The mainstreams of these technologies have certainly served vested interest. For instance, television ICT has been used as a tool of cultural imperialism by the developed world to push its version of globalization. Similarly, ICTs also carry strong possibilities for empowerment of women. The invention of paper and, later, of printing opened the flood gates of knowledge. That is, dissemination of widespread use of books and emergence of mass education

democratized the power of information and opened new possibilities for the excluded to resist exploitation. Radio brought public discussions into streaming in of live reality the world over. Telephone personalized communication over long distances. All these ICTs have been redefining gender relations in complex and multi-dimensional ways. Feminist critique provides insights into how the media can be a powerful force in reinforcing traditional ideas and how women and men have actively used the media to challenge gender norms (Kiran Prasad, 2004).

In this age of new communication technology both Internet and mobile are bringing about noticeable changes in Indian society. Internet is an instantaneous revolution, which reveals on various fields of applications like information, education, databases, individual access, globalization and networking. The new communication technologies are such as Internet, Mobile phone and Computers, etc. The communication technology includes the hardware equipment, organizational structures and social values by which individuals collect, process and exchange information (Singhal and Rogers 2001:31). The new communication technologies have certain characteristics that are similar in some respects to those of both interpersonal and mass media communication. Singhal and Rogers (2001) acknowledge the Internet for serving as an invaluable resource in researching, writing and illustrating. They accessed a number of Indian newspapers, magazines and hundreds of other relevant websites tracking down the sources through the Internet, bridging in at an instant the physical distance. Technology enables globalization that has created a new global economy "powered by technology, fueled by information and driven by knowledge". The emerging trend of this global economy has occupied serious implications for the nature and purpose of educational institutions and teaching-learning process. Information and Communication Technologies (ICTs) refer to a diverse set of technological tools and resources to create, disseminate, store, evaluate and manage information. The ICT sector consists of segments as diverse as telecommunications, television and radio broadcasting, computer hardware and software and services and electronic media, for example, the Internet and electronic mail. Hence, ICTs are sets of technologies that include both new and not so new equipments for human and digital communication. ICTs constitute an important interface in transfer of knowledge and technical expertise. ICTs are tools, which relatively easier to develop and produce human and social dimensions to improve the status of women in urban areas. Most of the literature on gender and ICT considers access by women to ICT. This includes infrastructure, training, local content and women in rural or underserved areas and urban areas.

Women of Uganda Network (WOUGNET) are a non-governmental organization initiated in May 2000 by several women organizations in Uganda to develop the use of ICTs among women as tools to share information technology. According to the findings from WOUGNET Evolution Report 2003 (Which is used as Gender Evaluation Methodology (GEM) tool useful in assessing initiatives in using ICT for social change), WOUGNET had increased awareness and participation of women in ICT related activities as well as increase information sharing and networking among women.

Information and Communication Technology (ICT) is a force that has changed all aspects of life (Ron Oliver 2002). Amidst various dimensions of ICT applications, the emergence of education acquires importance for promotion of gender equality as well as empowering women. Information and Communication Technologies (ICTs) are rapidly changing to deliver on promises of universal education around the world. With the advent of ICTs, gender assumes new dimensions of ICT facilities, ICT employability and ICT potential for education-powered gender empowerment and promotion of gender equality.

There is a remarkable challenge facing all societies in today's world, especially developing countries. No countries and new communities are being left untouched by the 'information society' and given the state of recent inter-government and multi-stakeholder policy. Around the world, new Information and Communication Technologies (ICTs) have changed the levels of individual organizations and entire nations. ICTs are creating new channels for social awareness and mobilizing resources. These bring profound implications for women and men in terms of employment, education, health, environment, health, environmental sustainability and community development.

There is an obvious disparity in the percentage of woman working in the professional field of science in a state like Kerala, pointing to male domination prevailing in the occupational structure of society. In the information network, marginalized women who are illiterate and indigenous women are facing difficulties in accessing ICTs. ICTs are intermediated by gender perceptions in societies. Policies, programmes and projects need to ensure that gender differences and inequalities in the access to and use of ICTs are identified and fully addressed so that such technologies actively promote gender equality and eliminate gender-based disadvantages.

1. Technology and the Social Context

The philosophers considered the problems of knowledge, information and technology for millennia. In specific historical context, considerations of the implications of technological development animated important strands of 20th century philosophy, inspired by Marx technology comes to dominate human being. In his own book, 'Technology', Neil Postman (1997) argues that culture is receding to the wave of an "information gut". Technologies including ICTs are not gender-neutral, rather the use of ICTs and other technologies by woman and men reflects to a large context, the wider socio-cultural and economic context within which the technologies are produced and used (Sophia Huyer and Tatjana Sikoska, 2003). He also argued that Information and communication technologies comprise a complex and heterogeneous set of goods, applications and services used to produce, distribute, process and transform information. ICTs are socially neutral and that ICTs are tools that are useful and being used regardless of the social, economic or political contexts. By extension, they have also been considered to be gender neutral in that it is expected that women will naturally and automatically benefit equally from them. Frankfurt school as among the most influential thinkers on the technology issues, Marcuse, Adorno, Harkheimer and Benjamin considered the impact of technology, both, as a material object and as a form of rationality and a society itself.

The progress in technological change can be understood in terms of the tools and techniques and products diffused over the past years. Technology joins with communication in a complex interrelationship with human rights. Nicholas Negroponte's book (1995) 'Being Digital' is a shining example of the work of a technophile. Negroponte populates a new and forthcoming Utopia with electronic butlers, robot secretaries and facts of digital assistants. In Negroponte's world, a computer sees and hears respond to our every speak, show fact and discretion, and interacts according to our individual prediction, habits and social behaviour.

Technology as a tool must fit into its social context; otherwise, it is inanimate object. It is important to note that the major implications of technology including ICTs are a technology project of social contexts which are around us.

Technological and social changes are equally essential for shaping each other and therefore technology and behaviour tend to imply that ICT- related behaviour as a process of "double

articulation"(Valarie et al 2006). ICT has a powerful enabler of behavioural changes. In terms of technology and behaviour, ICT-related behaviour implies behaviour as a process of double articulation. ICT has a range of characteristics which make ICT as a quite powerful enabler of behavioural changes. It does not mean that ICT-related innovations determine behaviour. In social context, ICT-related behaviour shapes technological innovation. Innovations consider a series of consequences where the user used them in its own term. Like the user used technology as which is skewed towards patterns of existing behaviour. Pune (2000) developed a model which consists of factors that are termed as "building blocks" which describe and explain the process of appropriation of ICT in everyday life. There is a synthesis of factors which are coming out of both quantitative , descriptive and qualitative research . This model shows that different variables are lived in everyday life which demonstrates both qualitative and quantitative research. It demonstrates that traditional quantitative variables which imply the socio-demographic and socio-economic position of users that deal with their attitudes, knowledge, capabilities and time-space dimensions. These variables are more closely related to the qualitative dimensions of the context of everyday life, i.e. the technological culture of the household, every day practices and the functional and symbolic meanings of ICTs. It is within the dimension that domestication occurs where the agency of users and non-users can be perceived. "Once technology finds its place in the routines and practices of everyday life, it has the potential to bring about the substantial changes in those routines and practices for the specific characteristics of ICT. This is termed as double articulation."(Valarie et al 2006).

2. Gender, Education and ICTs

Humans use symbols of shared meanings for everything. When the meanings are assigned with gender perception it is 'gender symbolism', in Herbert's words, implying that men and women have differences in the way they define and assign meanings to these symbols (Haralambos and Holborn 2000). Girls tend to under-represent their abilities in mathematics even when they take the same advanced course as boys, and even when they get marks that match or exceed their male counterparts. This is what Looker termed as Gender Modesty where males overestimate and females underestimate their abilities in male dominance spheres (Looker 2008). In many Muslim countries, gender-based discrimination coupled with social and cultural barriers limits the access and participation of women in higher education. In the U.S. and

Canada, the environment of women students in first Science courses is greater in biological and health sciences than in courses like Engineering where enrolment remains below 30% (Hussan 2000). According to UNDP (2002), the Caribbean is the only region where the percentage of women working in Science and Engineering is over 50%. In the developing countries, access to education is an issue for many girls and young women when they are able to attend school; they face further restrictions in terms of access not only to the technology oriented courses but also to science and technology courses where men become target. These gender divisions are often reinforced by cultural belief systems as well as income differentials. So, the nature and extent of the gender-divide often varies by ethnic, racial and cultural group (Looker 2008).

In some African countries, literacy is less than 30% in local languages and women face challenges in pursuing education at all ages due to lack of time to attend classic family and domestic responsibilities and socio-cultural practices that rates girls' education lower than that of boys. Even for a large number of educated women in Eastern Europe and Latin America have a lack of proficiency in international languages. The majority of poor women in the world do not speak the languages which dominate the internet, i.e., English, French, German, Chinese etc. Knowledge and experiences are thus not adequately reflected on the internet where gender predominate (Claudia Morrell 2007).

In a study of trainee teachers in faculties of Athens University in 2005-06, conducted by Anastasia et al. (2008) in Europe, the teachers were asked to make a self-reflection on their ability to incorporate ICT in teaching history and foreign languages. The study revealed that male teachers scored significantly higher (47.0%) than female teachers (41.5%). Trainee teachers who had several years' experience in ICT also scored higher than those who had not. They concluded that teachers were sufficiently confident with their ability to integrate ICT in teaching and male trainee teachers were more confident than female teachers with the ability to integrate ICT in teaching (Anastasia et. al 2008).

ICTs are strengthening the relevance of education in a teaching-learning situation or classroom situation and helping to build teaching and learning into an engaging, active process connected to the real life. The capacity of technology is to provide support for customized educational program to meet the needs of both the learners including girls and boys and the growing use of the internet and mobile telephony used as tools for information access. The ICT potential in education prevails across all factors of human life such as medicine, tourism, business, law,

banking, engineering and architecture. But there have emerged some other factors which have strengthened adoption of ICTs in classrooms and learning settings; viz., (i) ICTs are for all students and used as an enabler to reduce the digital gap, (ii) ICTs are used as teaching and learning tools in course curriculum and (iii) ICTs are used to increase efficiency, productivity and effectiveness of the teaching (Anastasia et. al. 2008), implicating a growing need to explore efficiencies in terms of program delivery, the opportunities for flexible delivery that provided by ICTs (Oliver and Short 1996).

Gender is an issue which has not included in the field of information system research. In 2004, Adam Richardson has interpreted a decade of neglect of gender within information system research. He is also arguing that gender remains under-theorised in Information System, while it has important feature within published literature. There is sufficient literature on discussing the nature and extent of a gender based digital divide. From various research studies, it appears that gender digital divide is mainly observed in terms of the ways that females are disadvantaged relative to males.

Gender and ICT advocacy networks are still small and they lack capacity. The gender and ICT advocacy movements remain on the outer edge of the women's movement and have been insufficient take-up of gender equality and women's empowerment within the broader civil society. However, ICT has begun to be seen as a significant tool for social change especially in the areas of women empowerment. In many organizations ICT projects in poor communities with a view to reducing poverty have reported that in many cases the biggest achievement of their projects is instilling a sense of personal empowerment especially among women. Feminists know that personal empowerment is a necessary and important aspect in women's economic emancipation (Mridul Chowdhury and Tahamina Khanam 2005). In a project carried out in Kerala on IT skills, English language skills and client sector knowledge as well as capacities, including team working, ability to work under pressure and ability to work flexibility. Shoba Arun (2004) reported that no gender differences of technology language related skills were perceived in relation to work practices, although women had less work experience than men in their workplace.

A study was carried out by Susane Maass et al. (2007) on global scale, where it refers to different countries of the world. In south and north zone of the world women's access to internet is generally lower than men. In January 2002, men in France, Germany, United Kingdom,

Norway, Denmark and Sweden were about 40-45% internet users where as women in Italy and Spain were below 40% of accessing internet. In 2006, men internet users in Germany were 65.4% and women were 51.5%. They studied in several European counties like Germany, United Kingdom, Netherland, Belgium, Italy, Denmark, Finland, Sweden and France the numbers of women researchers in Engineering and Technology were below 20% and men were above 35%. From the above study it shows that women's use of internet is less than men.

The study of Kevin Leung et al. (2008) based on Students Satisfaction Inventory (SSI) aimed to measures students' perception about online services. Regarding the respondents' label of satisfaction it was observed that the students were satisfied with the online services. Here, female students had higher expectations than male students.

3. ICT and Gender Empowerment

An international meeting on "Re-Engineering Development Engendering ICTs" was sponsored by UNESCO's Center for Women and Information Technology (CWIT) and European Association for Women in Science, Engineering and Technology in the UNESCO's Paris headquarters office during November 12-16, 2005. The meeting brought together select members of policy development and education experts concerned about women's basic access to literacy in information and communication technologies (ICTs). Heike Jensen (2005) says that the 'Freedom of expression' refers a document about women's rights like a good thing. After all, women are fighting for freedom of expression through media.

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application in their daily activities, (b) Lack of connectivity to access information services, (c) Lack of information translated into the local language to meet the needs of the diversified members and (d) Lack of diversified methods of applying information that would satisfy both urban and rural women. Dorothy Okello (2005) explores how WOUGNET is working with the Government and civil society organizations in Uganda to enhance access to information and also use of ICT by rural women to improve their quality of life.

New jobs for women in ICT are essential for their development, by reducing poverty of the other gender. A number of projects in South Asia, focused especially on income generating activities and direct employment benefits for women, created a space that acted as information exchange and support network. Women are based on economic class in terms of rural or urban residence, family structure and support, technical expertise and technology confidence. At the high end, these projects are, in high tech industries, creating well-paid jobs and global entrepreneurship opportunities for women professionals, and provision of market and craft production information on radio to the rural, at the low end. There are mid-level IT based employment options for working in call centres, electronic assembly lines and small enterprises. In all these levels ICTs create jobs or employment opportunities, most of them in urban areas (Revathi Balakrishanan 2005).

"Look at the world through women's eyes", referred a poster at the venue of the Fourth World Conference in Beijing in September 1995. It meant for gender equality and for advancement and empowerment of women (Vinod, Kanchan and Cheeli 2005). In the past 10 years, the gender and ICT advocacy movement, a rights-based gender and ICT agenda, has grown internationally and regionally, from Beijing Conference in 1995 to the World Summit Information Society (WSIS) in December 2003. Generally gender and ICT advocacy networks are still small and lack capacity. The gender and ICT advocacy movements remain on the outer edge of the women's movement and have been insufficient take up of gender equality and women's empowerment within the broader civil society. However, ICT has begun to be seen as a significant tool for social change especially in the areas of women empowerment (Mridul Chowdhury and Tahamina Khanam 2005). The broader goals of achieving gender equality, women's empowerment and promotion of women's rights should be prioritized in the field of ICT for development. Its significance is magnified by the fact that the majority of the world's population that remains

untouched by the ICT revolution is women. In many organizations ICT projects in poor communities with a view to reducing poverty have reported that in many cases the biggest achievement of their projects is instilling a sense of personal empowerment especially among women. Feminists know that personal empowerment is a necessary and important aspect in women's economic emancipation.

Over the last two decades Sri Lanka recognized the need to reduce urban-rural disparities but there is no explicit reference to addressing gender issues. The information and communication technologies have the potential to benefit women but at the same time these also have the potential to marginalize them in the knowledge based economy if gender issues are not addressed. The Govt. has a crucial role in ensuring that women are able to access the benefits of ICT. The digital technologies are looked upon as an instrument to overcome poverty, improve welfare and empower women. ICT education is a deceptive from the point of view of expanding the capacities of women to avail new employment opportunities that arise in ICT (Lellangi Wanasundera 2005). It is suggested that there has been an important shift of using ICTs over a period of time and it proposes to examine that ICT plays a significant role for reducing gender inequalities in an empirical situations.

In a study of the stories of some working women in England, those are working in the field of Information Communication Technologies; Marie Griffiths et al. (2006) have observed that some women are working in global organization in male dominated environment. Due to their high ambition, high expectation and hardworking, they are becoming junior software developer to general manager. Some other women are working in private organization and public sector. Women those are working in private sector organizations are facing some difficult challenges. They suggest for working in public sector organizations where stress will be reduced. Some women are working as ICT officials in high positions are also award winning. World Employment Report (2001) observes that patterns of gender segregation are being reproduced in the information economy. Here, women hold 9% of IT related jobs in engineering and 28% of computer Programmers and 26% of System Analysts. In most countries, women are underrepresented in ICT decision-making structures including policy-making. In most of the countries of the world, service licenses are attributed to companies without equal opportunity policies which are controlled by men (Women 2000 and beyond).

In a study of Korea, Natasa Firmo (2003) observed the advancement and empowerment of women in Korea. There are the internal barriers where many women are using ICTs for their empowerment. But, there is a lack of self-confidence in technology which restricts their use of ICTs. These barriers re-enforce women's lower usage of ICTs in comparison to men (Natasa Firmo 2003). Two thirds of the world's 870 million illiterate people are women and world's lowest literacy rates among are found in thirteen African countries; literacy is less than 30 percent in local languages. Here, women are facing challenges in pursuing education at all ages due to lack of time to attend classes, family and domestic responsibilities and socio-cultural practices that rate girls' education lower than the boys. While the gender gap in primary and secondary school enrolment has been narrow in recent years, girls still represent 60% of the 100 million schools. Children in the developing world grow up without access to basic education. Sub-Saharan Africa, Southern Asia and the Arab states are some to 95% of these out of school children. In 35 countries around the world, 18 of them in Sub-Saharan Africa, the rest in Asia and the Arab states where girls' net enrolment at secondary level is at least 6% which is lower than boys (report 2006). The employment sector in Sub-Saharan Africa, internet capabilities was available in Ghana, Nigeria, Kenya and six other countries. Here, the Nitsika Enterprise Promotion Agency has begun negotiations with various parities which is providing ICT services and policies (Louw 1996). On the other hand, E-ghana is a project for providing and training ICT Jobs for women at all levels. It is providing an attractive employment opportunity for women (Marish 2008).

4. Gender, Internet and Mobile Phone Technologies

In this age of new communication technology both Internet and mobile are bringing about noticeable changes in society. Mobile is an important tool of ICT. The use of mobile phones along with the Internet, World Wide Web (WWW), Teleconferencing and other digital media have added a whole new dimensions to human communications. **"**Internet occurred when the concept of an associative system for the organization of data impacted on growing sophistication in the research community about the handling electronic data within networks" (Brian Winstone, 2000). In fact, this technology has been the impact of recent advances in ICTs that now we can communicate to any one, anytime, anywhere. Consequently, socio-cultural perceptions of life and lifestyles have changed comprehensively. In order to understand general social change, we

must in a communication theoretical perspective consider mass media, interactive media like internet, and the interaction of symbolic media which makes social communication possible.

Internet is "socially unstratified" as, like no other communication media, people of all ages, colours, creeds and nations freely share internet, ideas, data, and opinions and one computer is not better than any other, so it is not stratified (Shamim 1998). Singhal and Rogers (2001) acknowledge the Internet for serving as an invaluable resource in researching, writing and illustrating. They accessed a number of Indian newspapers, magazines and hundred of other relevant websites tracking down the sources through the Internet, bridging in at an instant the physical distance. E-commerce initiatives constitute a linkage among women artisans and global markets through the Internet which supports their activities with market and production information. This strategy has been tried by NGOs in many places.

Historically, the United Nations has played the leading role in shaping ICT as a tool for development .The issue of woman and ICTs has been the international agenda since the Fourth World Conference on women in 1995 in Beijing, for increasing women's access to new communication technologies (UNDP 2001). Women's access to ICTs is the most important issue where gender and ICT agenda are addressed.

A number of global trends are identified specific to Central Eastern Europe (CEE) /Common Wealth of Independent States (CIS), and others. These are as follows:

(a) Women are underrepresented at all levels of ICT initiatives in CEE/CIS and the integration of gender and/or women-specific issues is limited.
(b) CEE/CIS is largely absent from global gender ICT debates and forums.
(c) Gender equality advocates are uninformed about the importance and relevance of Information Communication Technology for Development (ICTD) to gender equality agenda.
(d) Access to training opportunities to acquire basic skills is insufficient for advancing women's equal access and participation in the ICT sector.
(e) Young women have greater opportunities to participate in ICT activities and environments than do older woman who deserve further encouragement and support. A critical starting point for achieving gender balance in the ICT sector is tertiary level education (WSIS, 2003).

Nancy Hafkin's study (2008) on two middle-income Asian countries, Philippines and Thailand revealed, where women were doing well on several of the success indicators for participation in the global knowledge society. Significantly, in Philippines women have high internet access than men .Women lead the highest internet access in the world than men exceeding the rich countries like the United States, New Zealand, Canada and Australia. In Philippines, the number of women engineers is low but higher than in many countries and increasing rapidly. While the rate for men graduating in engineering decreased by 10.8% and women increased by 40.6%. In Thailand, the female internet users are more about 51.2% and male internet users are less about 58.3%. In Thailand, women's participation in the knowledge society is in the age group of 28-29. The majority of the students are girls. In mathematics and computer related field at the University in Thailand, women are close to men while in engineering their representation is low then that of men but it is higher in other subjects like mathematics and computer science. In her study, two countries make the case for systematic study of gender issues in the evolving global knowledge society. In the case of Philippines and Thailand, women are going ahead despite of lack of full gender equality and empowerment. If the constraints of women's equality and empowerment were removed, a socially inclusive knowledge society based on full gender equality will emerge (Nancy Hafkin 2008).

On a global scale the kind and quantity of ICT use still differs widely. Stewart has collected the following information; Women's access to internet technology is generally lower than men's. And this is true not only for the south but also for the North (except for the US). According to SIGIS report in January 2002, women in France, Germany, U.K, Norway, Denmark and Sweden accounted for about 40-45% of all internet users, with women in Italy and Spain just below 40%. Especially among people with low educational back ground the gender gap is much more significant (Stewart 2002: 5). The overview also lists research results which show that women use the Internet less often than men and the individual Internet sessions by men take longer than women. In 2006, the percentage of internet users among men (65.4%) was still among women (51.5%) in Germany (TNS infra test 2006).

In India the communication research in the field of sociology and social anthropology is relatively new. It is only in the late 1950s and early 1960s that communication began to attract the attention of researchers engaged in the investigation of the phenomena of planned social

change in India. Y. B. Damle's article (1956-1957) in Public Opinion Quarterly under the title "Communication of Modern Ideas: Knowledge of Indian Villagers" can be regarded as the first major work in the field of the sociology of communication in India. He studied the diffusion of modern ideas and knowledge in several villages near Pune (Maharashtra) and showed that not merely distance from the city facilitated or hindered communication of ideas and knowledge but it was equally affected by the social structure of the community which determines the qualitative and quantitative content of the communication in national development. He concluded that development of communication and the resulting flow of information is followed by or goes hand-in-hand with development in other areas. Atal (1973) developed a communication model for analyzing nation-building in which he discussed social apertures and insulators as facilitating and obstructing mechanisms in the free flow of information.

Antony Palacal et al. (2006) carried out a study in two south Indian states like Kerala and Andhra Pradesh. From their study, it is observed that social disparities were less in Malapuram in Kerala than Kuppam, Andhra Pradesh. Here social divide and digital divide re-inforce each other. In Kuppam, persons who had computers they were better educated. It is observed that no women in Kuppam used computer. In Malapuram, there were two Muslim women of 22 and 23 years were studying PG courses. Both were using computers and looking for jobs through the internet. From their study it revealed high social inequality in Andhra Pradesh compare to Kerala.

Ooman (1992) has conducted a study on women scientists in Kerala. Out of the total number of 90 respondents from the four institutes, there were only 20 women scientists who constituted 23.3% of the total sample. In other words, the number of male scientists who took part in the study was more than three times the number of female scientists. Hence, out of the 31 respondents at the CTCRI, there were only 10 females (32.3%) and at the CESS only two females, forming a negligible percentage of 6.7%, while the male respondents (28) represented 93.3%. The science departments of the University of Kerala contributed a total of 22 participants of which 18 % were male and 5% female. Except in the KAU, the qualitative interviews covered nearly all the scientists. So the sex ratio of the respondents in the study, with the exception of the KAU, is indicative of the real proportion of both genders in the science profession in Kerala. This obvious disparity in the percentage of women working in the professional field of science in

a state like Kerala points to the male domination prevailing in the occupational structure of society.

Self Employed Women Association (SEWA) uses ICT for women empowerment. The goal of SEWA is to promote local income that generates opportunities among men. The SEWA with 2 lakhs memberships is spread over 800 villages in Gujarat. It uses organizing the venetary artificial insemination, cattle feed and other related services. Usage of ICT gives a long way in empowering men and women (Chandra Gowda 2010). The Self-Help Group (SHG) Movement is primarily addressing the requirement of rural women by organizing a homogeneous group. Women bring their resources to engage in micro-entrepreneurship activities and share income is generated. It is found that SHG model for women's empowerment is more sustainable than individual based model in India (Farida Khan 2010).

Farida Khan (2010) observed that there were 185 young Muslim women and men those were studying in the computer training centres in Mumbai. The training centres and Cyber cafes are necessary place to access for male and female. She found that young women/girls are higher than men from the computer literacy and ICT use point of view.

In a project carried out in Kerala on IT skills, English language skills and client sector knowledge as well as capacities including team working, ability to work under pressure and ability to work flexibility. Shoba Arun (2004) reported that no gender differences of technology language related skills were perceived in relation to work practices, although women had less work experience than men in their workplace.

The Sarvodaya Ashram Resource Center (SARC), IT initiative is located at a residential school for school for girls, which is called Udaan (means flight) at Hardoi, India. It is an example of how the integration of computer technology with girls' education which can improve student learning, teacher training and pedagogy skills and strengthen institutional capacities. The project is established in a remote rural setting where villagers have little exposure to technology. One hundred girls were trained to use computer programming. Teachers also received Computer training and experiment with basic computer programming. Although most of girls were initially intimidates by the computers, the learning process enabled them to overcome their fears (Hafkin and Taggart 2001)

According to the World Bank, tele density in India had reached 3.8% of the population by 2001.The number of internet account is growing at a rate of 50% per anum. The ITES-BPO sector grew at 59% and employment had reached 106,000 by 2004 (NASSCOM 2004). According to an IDC release, The IT and ITES sector is projected to grow 18% on the next five years to become an industry of Rs. 4.58 lakh Crores by 2011. But there is a strong digital divide in India is characterized by low levels of access to technologies. Poverty, lack of Computer literacy and language barriers are among the factors impeding access to ICT infrastructure especially in developing countries.

Suman Jain (2002) studied that ICTs are emerging as a powerful tool for gender empowerment in a developing country like India. He conducted study in Tamil Nadu with the rural women's co-operation and NGO's; there is a shop, an e-commerce website (2005) which has designed to sell products that made by rural woman. The self Employed Women's Association (SEWA 2004) has several ICT projects for woman that includes community learning centre, a school of Science and Technology for self-employed woman which provides mobile phones to woman in the informal sector. There is a Self-Help Groups (SHG) of rural women in Andhra Pradesh have been successfully working to market their products at home and abroad that the major MNCs (multi-national corporations) want to use their selling skills.

Rekha Prasad conducted a study which based on the European Union (EU-25). It was found that female workshop was 56%, even higher than the male service sector which was 53%. This percent of women in the knowledge based service sector was: .Latvia-76%, Lithuania-75%, Estonia-71%, Poland-70% Estonia-71%, Slovia-70%.

There is an increase access of remote areas and marginalized groups of ICT which is the development of public access centers, such as public phones, telecenters, libraries, information centers can be part of existing institutions such as health centers, schools and community centers. The growth of cyber cafes and kiosks has been very fast in India, especially in the Southern states where literacy is high. A survey is eight Indian cities have showed non-working woman access the net 63% from cybercafés and 32% from home. The M. S. Swami Nathan Research Foundation in India proved the usefulness in improving agricultural practices and marketing and access to medical facilities.

Women can enable health education and information exchange and offer simple solutions for collecting information about disease and health-seeking behavior to help health interventions which became more relevant. ICTs provide better access to AIDS advice, counseling and test results without fear of being any wrong means. The technologies are used in many places for information dissemination about health. The Self-Employed Women's Association (SEWA), trade union of women workers from the informal sector in India uses video to convey basic health information to its women members. The use of networked information exchange systems, and offline information tools like CD-ROM, database and mobile ICT devices can enhance public health delivery.

Chandra Gowda conducted a study in Gujarat where men used mobile phone more frequently than women. Men also used public Kiosks more frequently than women; in travelling they access phones more. The study revealed that social norms and financial consideration have some impact in the differences mobile users in low and middle income countries such as Kenya and India (Chandra Gowda 2010).

From the above studies, it appears that (i) in most of the countries, girls or female have lower percentage in Computer Science and Mathematics than males and due to that girls or females have lower confidence or not feeling comfort to work with the computer, (ii) though there are equal opportunities in schools, yet the girls get less marks than the boys, (iii) females have high position in private sector offices with their hard working, firm determination and high ambitions, yet, they are feeling a distance from their family/children and therefore want to join in public sector offices due to stress or over burden work in private sector offices and (iv) although the females have the potentiality of ICT training and skill, they have much less access and lower rates of use due to lack of language efficiency.

Surveying the issue of the impact of information technology on gender between developed and developing countries, in most of the literature, the impact of information technology deal with the association of men and women with technology and power. Digital divide of gender is the social concern running all through the discourses on inequalities and social justice. Scholars do realize that new communication technologies should be used to enhance skills of women which will empower them and reduce gender inequalities, but the efforts being made at the level of Government, Non-Government organizations and women's collectivity are constrained by

various factors. Hence, the technologies invented for human welfare are widening gender gap. It is also noted that the technologies are still concentrated in urban areas and benefits are more available to urban people. In the present state of affairs the issue of gender access to ICTs may be examined in the urban context which offers women some opportunities for skill enhancement. The conclusion drawn from the literature is that ICTs are intermediated by gender perceptions in societies and they may be instrumental in bridging the existing gender gaps or creating gender based digital divide.

As yet, we found only a few studies on gender access to ICTs and these, too, are located in the mainland. No such empirical study is available in the context of the North East India. Therefore, the present study is proposed to examine gender access to ICTs in Silchar town of Southern Assam.

OBJECTIVES OF THE RESEARCH

The aim of the study has been aimed to analyse patterns of gender access to ICTs and its social consequences. The specific objectives formulated for the study were as follows:

(i) To understand patterns of gender access to ICTs in Silchar town.
(ii) To identify the determinants of gender access to ICTs in Silchar town.
(iii) To know the social consequences of gender access to ICTs in Silchar town.
(iv) To assess the gender empowerment impact of ICTs in Silchar town.

HYPOTHESIS

The following hypotheses were formulated to test in the study:

(i) ICT skills significantly enhance gender access to educational training and its outcomes.
(ii) ICT skills significantly enhance gender employability.
(iii) ICT skills significantly enhance gender access to market.
(iv) ICT skills significantly enhance gender capability to draw upon public services.

METHODOLOGY OF THE RESEARCH

The study uses descriptive research design to analyse the relationship between gender and ICTs in Silchar town. It mainly focuses on two of the new communication technologies; Internet and mobile technologies, for empirical understanding.

The study is based on primary data collected from households in Silchar town. Silchar town is the universe and households are units of data collection. However, for analysis of data, household and individuals, both, have been used as units as per requirement. To select a sample of units for data collection, the municipal ward wise electoral roll lists for Silchar town, prepared for the Lok Sabha Elections, 2010, were procured. From the electoral lists of households a list of households with the help of the well informed persons from the respective ward. In each of the wardwise household list the households were listed by mentioning household number and name of the head of the household. The Silchar town has 28 wards in all. By using lottery technique of random sampling method, a sample of 5% households was drawn out of the total households in each of the 28 municipal wards of the town. Thereby, a main sample of 124 households was obtained out of the total 2355 households of the town as a whole. During the time of listing of the households in the municipal wards it was observed that the ward populations were more or less homogeneous in terms of religion or language. However, a few households were found from other types of groups in some wards while these preponderated in some other ward(s). This ensured a proportionate representation of the households of all groups in the wards of their preponderance as well as an equal chance to them for their inclusion in the main sample. The field data were collected by administering an interview schedule to the sampled 124 households during the period from 5th September 2011 to 7th March 2012. From the households, information was collected about each and every member. The total comes of 2847 persons including children below 5 years who's socio-economic and ICT- related characteristics have been collected in terms of gender. While collecting the information in a household, generally a well informed/educated member was interviewed and other members also joined to supply the information about the household and the ICT access among its members. The following table shows the Ward number, the locality it covered, total number of households and number of sampled households with percentage and persons about whom information was collected.

Table 1.1
Ward No., Locality Covered, Total Sampled of the Household and Members Studied
(Percentage in Parenthesis)

Ward No	Locality included under the Ward	No. of Households (%)		No of Persons (%)					
				Total			Sample		
		Total	Sampled	Male	Female	Total	Male	Female	Total
1	Itkhola	46 (1.95)	3 (2.41)	500 (3.10)	360 (3.50)	860 (3.25)	23 (1.26)	20 (1.95)	43 (1.51)
2	Iddga Road	85 (3.60)	3 (2.41)	720 (4.46)	300(2.92)	1020 (3.86)	32 (1.76)	21 (2.04)	53 (1.86)
3	Itkhola	93 (3.94)	3 (2.41)	809(5.01)	400(3.89)	1209 (4.58)	33 (1.81)	30 (2.92)	63 (2.21)
4	Bilpar	39 (1.65)	5 (4.03)	420(2.60)	243(2.36)	663 (2.51)	111 (6.1)	20(1.95)	231 (8.11)
5	Vivekananda Road	93 (3.94)	4 (3.22)	855(5.30)	540(5.26)	1395 (5.28)	215(11.8)	13 (1.26)	28 (0.98)
6	Hailakandi Road	38 (1.61)	2 (1.61)	816(5.05)	300(2.92)	1116 (4.22)	16 (0.88)	17 (1.65)	33 (1.16)
7	Rangirkhari	114 (4.84)	9 (7.25)	530(3.28)	320(3.11)	850 (3.22)	82 (4.51)	100 (9.73)	182 (6.39)
8	Old Lakhimpur Road	62 (2.63)	4 (3.22)	530(3.28)	400(3.89)	930 (3.52)	33 (1.81)	30 (2.92)	63 (2.21)
9	Padmanagar, Bilpar	191 (8.11)	17 (13.70)	933(5.78)	900(8.76)	1833 (6.94)	412(22.6)	212 (20.6)	724 (25.4)
10	Hospital Road	110 (4.67)	3 (2.41)	710(4.40)	610(5.94)	1320 (5)	22 (1.21)	11 (1.07)	33 (1.16)
11	Hospital Road	117 (4.96)	3 (2.41)	550(3.41)	330(3.21)	880 (3.33)	20 (1.1)	12 (1.17)	32 (1.12)
12	Shaymananda Ashram Road	113 (4.79)	7 (5.64)	720(4.46)	410(3.99)	1130 (4.28)	110 (6.05)	40 (3.89)	150 (5.27)
13	Kanakpur Road	104 (4.41)	6 (4.83)	724(4.48)	524(5.10)	1248 (4.72)	72 (3.96)	70 (6.81)	142 (4.99)
14	Sonai Road	136 (5.77)	4 (3.22)	531(3.29)	421(4.10)	952 (3.6)	33 (1.81)	36 (3.5)	69 (2.42)
15	Rabindra Sarani Road	95 (4.03)	4 (3.22)	825(5.11)	600(5.84)	1425 (5.39)	140 (7.7)	30 (2.92)	70 (2.46)
16	Link Road	46 (1.95)	11 (8.87)	615(3.81)	305(2.97)	920 (3.48)	106(5.83)	30 (2.92)	236 (8.29)
17	N.S.Avenue	79 (3.35)	4 (3.22)	758 (4.69)	300(2.92)	1058 (4)	45 (2.47)	33 (3.21)	78 (2.74)
18	VidyaSagar Sarani	93 (3.94)	3 (2.41)	709(4.39)	500(4.87)	1209 (4.58)	30 (1.65)	43 (4.18)	73 (2.56)
19	Chenkorie Road	60 (2.54)	2 (1.61)	100(0.62)	80(0.77)	180 (0.68)	9 (0.49)	8 (0.78)	17 (0.6)
20	Nazirpatty	65 (2.76)	3 (2.41)	650(4.03)	130(1.26)	780 (2.95)	31 (1.7)	21 (2.04)	52 (1.83)
21	Subhash Nagar	49 (1.95)	2 (1.61)	84(0.52)	63(0.61)	147 (0.55)	12(0.66)	11 (1.05)	23 (0.81)
22	Ambikapatty	45 (1.91)	2 (1.61)	355(2.20)	230(2.24)	585 (2.21)	6 (0.33)	6 (0.58)	12 (0.42)
23	Church Road	100 (4.24)	10 (8.06)	750(4.65)	530(5.16)	1280 (4.84)	80 (4.4)	97 (9.44)	177 (6.22)
24	Maulavi Road	50 (2.12)	3 (2.41)	900(5.58)	700(6.81)	1600 (6.06)	73 (4.01)	50 (4.86)	123 (4.32)
25	Trunk Road	80 (3.39)	2 (1.61)	150 (0.93)	50(0.48)	200 (0.75)	24 (1.32)	15 (1.46)	39 (1.37)
26	Jail Road	75 (3.18)	1 (0.8)	345 (2.13)	330(3.21)	675 (2.55)	12 (0.66)	11 (1.07)	23 (0.81)
27	Rangpur	50 (2.12)	1 (0.8)	100 (0.62)	70(0.68)	170 (0.64)	10 (0.55)	13 (1.26)	23 (0.81)
28	Satsanga Ashram Road	51 (2.16))	1 (0.8)	94(0.58)	90(0.87)	184 (0.69)	5 (0.27)	5 (0.49)	10 (0.35)
27	Mission Road	35 (1.48)	1 (0.8)	145 (0.89)	100(0.97)	245 (0.92)	10 (0.55)	12 (1.17)	22 (0.77)
28	Tarapur	41 (1.74)	1 (0.8)	200(1.24)	128(1.24)	328 (1.24)	12 (0.66)	11 (1.07)	23 (0.81)
Total		2355 (100)	124 (100)	16128 (100)	10264 (100)	26392 (100)	1819 (100)	1028 (100)	2847 (100)

Source: Field Survey Conducted during the Period from 5th September 2011 to 7th March 2012

Data reveal that the insignificant number of total number of households belong to Ward No. 9 from Padmanagar, Bilpar followed by Ward No. 14, belong to 383 Sonai Road and Hospital Road belong to Ward No. 10, Rangirkhari belong to Ward No. 7, Hospital Road belong to Ward No. 11, Shyamananda Ashram belong to Ward No. 12, and rests belong to Rabindra Sarani Ward No. 15, N S Avenue Ward No. 17 , Vidyasagar Sarani Ward No. 18 etc. More than one tenth of sampled households belong to Ward No. 9 from Padmanagar Bilpar, followed by the insignificant No. of Link Road belong to Ward No. 16, Church Road belong to Ward No. 23, Rangirkhari belong to Ward No. 7 and the rest belong to Shayamananda Ashram Road belong to Ward No. 12, kanakpur belong to Ward No. 13 etc. More than one fifth (21.7%) of male members of the households belong to Ward No. 9 are from Padmanagar Bilpar. The rest of male (29.1%) are from Link Road belong to Ward No.16, Shyamananda Ashram Road, Ward No. 12, Bilpar Ward No. 4 etc. Over one fourth (29) of female members of the household belong to Padmanagar followed by Bilpar belong to Ward No. 4 and the rest belong to Link Road, Ward No. 14, Rangirkhari belong to Ward No. 7 etc. Thus, it indicates that female is little more than male because in the town male population is of 86,812 and female is of 85,897 where ward population is more or less homogeneous. It is observed that there are 2847 persons from 124 households those use and access old and new ICT and vice visa. The distribution of both users and non-users of old ICT and new ICT is given in here.

Old and new ICT is a significant mass media for each family members of urban society in Silchar town. Persons from each family/ household have wide access to old ICT. Old ICT deals with print media and audio visual media. Print media constitutes two components, namely newspaper and magazine. Audio Visual media is classified into three components like Radio, FM Radio and TV. There are 2847 persons (both users and non-users) from the sampled 124 households in Silchar town. The newspaper users are of 1067, comprising of 615 male and 452 female, magazine users of 298, comprising of 136 male and 162 female, radio users of 180, comprising of 84 male and 96 female, FM radio users of 158, comprising of 77 male and 81 female, TV users of 591, comprising of 311male and 280 female, out of 2847.There are 553 non-users of old ICT.

On the other hand, persons from each family / the household have also wide access to new ICTs. New ICTs deal with computer, internet and mobile phone. There are 2847 Persons (both

users and non-users) from the sampled 124 households. There are 1241 users, comprising of 664 computer users and 577 internet users, out of 2847.Out of 577 internet users, there are 567 users having computer basic knowledge by training or skill. It is observed that only 10 users having no computer basic knowledge. Only having minimum computer common knowledge, they are using internet. There are 1606 non-user, out of 2847 sampled population. 568

Again, there are 2847 persons from the sampled 124 households in Silchar town, out of which 1776 are mobile phone users and 503 are landline users or are using a combination of both Among 1776 users, as age-group is concerned, only 110 children users are not responding in impact pattern, use pattern, average bill etc. There are 568 non-users.

ORGANISATION OF THE STUDY

The study is organized into seven chapters. The Chapter 1 deals with Introduction formulates the problem in the light of brief review of the studies on ICTs, research questions, objectives, etc. and lays down the methodology of the research. The Chapter 2 describes Field of the Study that gives the context of study in terms of ICT development in Silchar town. The chapter analyses origin and history of Silchar Town and also discussed on two types of ICTs, namely old ICTs and new ICTs. Old ICT is a conglomeration of print media, visual and audio-visual media. New ICT is a conglomeration of computer, internet and mobile phone etc. The chapter 3 depicts Social Background of the Sampled Household Population that displays socio-economic features of the sampled households and population. The chapter discusses the socio-economic profile of sampled households representing persons that includes male and female. It also analyses socio-economic background of sampled persons such as religion, caste, occupation, economic condition, political and cultural participation in community development programs. The chapter 4 analyses Gender Access Patterns of Old ICTs brings out the extent and patterns of ICT exposure among the males and females from the sampled households**.** The chapter analyses the emerging pattern of gender access to old ICTs in Silchar town. It also analyses the access of old ICTs such as print media includes newspaper and magazine and audio-visual media includes radio, FM radio, TV that exposed by both males and females of Silchar town. The chapter interprets the social impact of mass media in Silchar town. The Chapter 5 describes Gender Access Patterns of Internet Communication that analyses the patterns of access and use of Internet among the males and females from the sampled households. The chapter discusses an

emerging pattern of gender access to Internet Technology of Communication in Silchar town. The chapter analyses the gender access to computer with respect to having knowledge, purpose, place, time span etc. It also analyses the gender access to Internet Communication that relates to place, purpose, attitude and impact. The chapter interprets the social impact of Internet Technology of Communication in Silchar town. The Chapter 6 discusses Gender Access Patterns of Mobile Phone Communication that analyses the patterns of access and use of mobile phones among the males and females from the sampled households in Silchar town. The chapter analyses the place of access, facilities, purpose, average bill, land line and mobile phone comparison etc. It also discusses the social impact of Mobile Phone Technology of Communication in Silchar town. Finally, the Chapter 7 describes Summary, Findings and Conclusion that give an overview of the research study and conclude it with some future directions.